

WHAT IS CLAIMED IS:

1. A container comprising a base having a bottom wall and a continuous base wall, the continuous base wall encompassing the bottom wall and extending upwardly therefrom, the base being made from a mixture of a polyolefin and a filler, the mixture comprising from about 30 to about 75 wt.% filler and from about 25 to about 70 wt.% polyolefin, the filler includes a high aspect ratio filler and a low aspect ratio filler, the high aspect ratio filler having an aspect ratio of at least about 5:1 and the low aspect ratio filler having an aspect ratio of less than about 3:1, the filler comprising at least 50 wt.% of low aspect ratio filler.
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2. The container of claim 1, wherein the container further comprises a lid, the lid having a top wall and a continuous lid wall, the lid wall encompassing the top wall and extending downwardly therefrom, the lid being made from a mixture of a polyolefin and a filler, the mixture comprising from about 30 to about 75 wt.% filler and from about 25 to about 70 wt.% polyolefin, the filler includes a high aspect ratio filler and a low aspect ratio filler, the high aspect ratio filler having an aspect ratio of at least about 5:1 and the low aspect ratio filler having an aspect ratio of less than about 3:1, the filler comprising at least 50 wt.% of low aspect ratio filler.
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3. The container of claim 1, wherein the high aspect ratio filler has an aspect ratio of from about 5:1 to about 40:1.
4. The container of claim 3, wherein the high aspect ratio filler has an aspect ratio of from about 10:1 to about 20:1.
5. The container of claim 1, wherein the low aspect ratio filler has an aspect ratio of from 1:1 to about 2:1.
6. The container of claim 1, wherein the filler comprises from about 50 to about 80 wt.% low aspect ratio filler and from about 20 to about 50 wt.% high aspect ratio filler.

7. The container of claim 1, wherein the high aspect ratio filler is talc, mica, wollastonite, or combinations thereof.

8. The container of claim 7, wherein the high aspect ratio filler is talc.

9. The container of claim 1, wherein the low aspect ratio filler is calcium carbonate, barium sulfate, or the combination thereof.

10. The container of claim 9, wherein the low aspect ratio filler is calcium carbonate.

11. The container of claim 1, wherein the polyolefin is a polypropylene, a polyethylene, or combinations thereof.

12. The container of claim 11, wherein the polyolefin is a polypropylene.

13. The container of claim 12, wherein the polyolefin is a polypropylene homopolymer.

14. The container of claim 12, wherein the polyolefin is an impact copolymer polypropylene.

15. The container of claim 1, wherein the mixture comprises from about 35 to about 65 wt.% filler and from about 35 to about 65 wt.% polyolefin.

16. A container comprising a base having a bottom wall and a continuous base wall, the continuous base wall encompassing the bottom wall and extending upwardly therefrom, the base being made from a mixture of a polyolefin and a filler, wherein the filler includes a mixture of from about 20 to about 50 wt.% talc and from about 50 to about 80 wt.% calcium carbonate.

17. The container of claim 16, wherein the polyolefin is a polypropylene, a polyethylene, or combinations thereof.

18. The container of claim 17, wherein the polyolefin is a homopolymer polypropylene.

19. The container of claim 17, wherein the polyolefin is an impact copolymer polypropylene.

20. A container comprising a base having a bottom wall and a continuous base wall, the continuous base wall encompassing the bottom wall and extending upwardly therefrom, the base being made from a mixture of a polymer and a filler, wherein the filler includes a mixture of from about 20 to about 50 wt.% of a first filler and from about 50 to about 80 wt.% of a second filler, the first filler being selected from talc, mica, wollastonite, or combinations thereof, and the second filler being selected from calcium carbonate, barium sulfate, or combinations thereof.

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21. The container according to claim 20, wherein the first filler is talc.

22. The container according to claim 20, wherein the second filler is calcium carbonate.

23. A sheet adapted to be formed into a container, said sheet comprising a mixture of a polyolefin and a filler, the mixture comprising from about 30 to about 75 wt.% filler and from about 25 to about 70 wt.% polyolefin, the filler includes a high aspect ratio filler and a low aspect ratio filler, the high aspect ratio filler having an aspect ratio of at least about 5:1 and the low aspect ratio filler having an aspect ratio of less than about 3:1, the filler comprising at least 50 wt.% of low aspect ratio filler.

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24. The sheet of claim 23, wherein the sheet has a flexural modulus of at least 350,000 psi as determined by ASTM D790.

25. The sheet of claim 24, wherein the sheet has a tensile modulus of at least 300,000 psi as determined by ASTM D638.

26. A sheet comprising a base made from a mixture of a polyolefin and a filler, the mixture comprising from about 30 to about 75 wt.% filler and from about 25 to about 70 wt.% polyolefin, the filler includes a high aspect ratio filler and a low aspect ratio filler, the high aspect ratio filler having an aspect ratio of at least about 5:1 and the low aspect ratio filler having an aspect ratio of less than about 3:1, the filler comprising at least 50 wt.% of low aspect ratio filler.

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27. The sheet of claim 26, wherein the high aspect ratio filler has an aspect ratio of from about 5:1 to about 40:1.

28. The sheet of claim 27, wherein the high aspect ratio filler has an aspect ratio of from about 10:1 to about 20:1.

29. The sheet of claim 26, wherein the low aspect ratio filler has an aspect ratio of from 1:1 to about 2:1.

30. The sheet of claim 26, wherein the filler comprises from about 50 to about 80 wt.% low aspect ratio filler and from about 20 to about 50 wt.% high aspect ratio filler.

31. The sheet of claim 26, wherein the high aspect ratio filler is talc, mica, wollastonite, or combinations thereof.

32. The sheet of claim 31, wherein the high aspect ratio filler is talc.

33. The sheet of claim 26, wherein the low aspect ratio filler is calcium carbonate, barium sulfate, or the combination thereof.

34. The sheet of claim 33, wherein the low aspect ratio filler is calcium carbonate.

35. The sheet of claim 26, wherein the polyolefin is a polypropylene, a polyethylene, or combinations thereof.

36. The sheet of claim 35, wherein the polyolefin is a polypropylene.

37. The sheet of claim 36, wherein the polyolefin is a polypropylene homopolymer.

38. The sheet of claim 36, wherein the polyolefin is an impact copolymer polypropylene.

39. The sheet of claim 26, wherein the mixture comprises from about 35 to about 65 wt.% filler and from about 35 to about 65 wt.% polyolefin.

40. A sheet comprising a base made from a mixture of a polyolefin and a filler, wherein the filler includes a mixture of from about 20 to about 50 wt.% talc and from about 50 to about 80 wt.% calcium carbonate.

41. The sheet of claim 40, wherein the polyolefin is a polypropylene, a polyethylene, or combinations thereof.

42. The sheet of claim 41, wherein the polyolefin is a homopolymer polypropylene.

43. The sheet of claim 41, wherein the polyolefin is an impact copolymer polypropylene.

44. A sheet comprising a base made from a mixture of a polymer and a filler, wherein the filler includes a mixture of from about 20 to about 50 wt.% of a first filler and from about 50 to about 80 wt.% of a second filler, the first filler being selected from talc, mica, wollastonite, or combinations thereof, and the second filler being selected from calcium carbonate, barium sulfate, or combinations thereof.

45. The container according to claim 44, wherein the first filler is talc.

46. The container according to claim 44, wherein the second filler is calcium carbonate.